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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

## Office Action Summary

**Application No.**

10/761,261

**Applicant(s)**

ITO, WATARU

**Examiner**

David P. Rashid

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 1/22/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

### **DETAILED ACTION**

All of the examiner's suggestions presented herein below have been assumed for examination purposes, unless otherwise noted.

#### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d) (Application # 2003-028774, filed 1/22/2004 and Application # 2003-366624, file 1/22/2004), which papers have been placed of record in the file.

#### ***Drawings***

2. The following is a quote from 37 C.F.R. 1.84(q):

*Arrows.* Arrows may be used at the ends of lines, provided that their meaning is clear, as follows:

- (1) On a lead line, a freestanding arrow to indicate the entire section towards which it points;
- (2) On a lead line, an arrow touching a line to indicate the surface shown by the line looking along the direction of the arrow; or
- (3) To show the direction of movement.

3. FIG. 2, FIG. 3, FIG. 4, and FIG. 8 are objected to under 37 C.F.R. 1.84(q) for failing to properly use arrows when needed – it is suggested to remove the underlining and convert element 100 (FIG. 2, FIG. 8), element 120 (FIG. 3), and element 140 (FIG. 4) to a freestanding arrow to indicate the entire section toward which it points.
4. FIG. 5 is objected to because it is unclear to how the question “user is similar to which dangerous person?” can be answered by a “yes” or “no” answer as depicted – it is suggested to reword the question.

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5. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Specification***

6. The disclosure is objected to because of the following informalities:
- (i) Paragraph [0043], line 2 contains a grammatical error – suggest changing to “...may also increase more than usual the number...”.
- Appropriate correction is required.

#### ***Claim Objections***

7. The following is a quotation of 37 CFR 1.75(a):

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The specification must conclude with a claim particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention or discovery.

8. **Claims 1 through 14** are objected to under 37 CFR 1.75(a), as failing to conform to particularly point out and distinctly claim the subject matter which application regards as his invention or discovery.

The applicant is restricting to specific male gender use of the personal authentication apparatus when using the word “himself” in the claims (e.g., claim 1 preamble “[a] personal authentication apparatus for certifying that a user is a person himself...”). It is suggested to change any use of the phrase “a person himself” to “the user”, as well as the phrase “said person himself” to “said user” to broadly cover any user using the personal authentication apparatus.

9. The following is a quotation of 37 CFR 1.75(d)(1):

The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description.

10. **Claim 14** is objected to under 37 CFR 1.75(d)(1), as failing to provide proper antecedent basis for the phrase “said suspected person” – it is suggested to either depend claim 14 from a claim from which said suspected person has been introduced, or introduce said suspected person into claim 14 directly.

### ***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. **Claims 1, 2, 11, 12 and 13** are rejected under 35 U.S.C. 102(b) as being anticipated by Lin (US 6,108,437 A).

Regarding **claim 1**, Lin discloses a personal authentication apparatus (FIG. 1) for certifying that a user is the user (Col. 1, lines 64 - 67), comprising:

an image pickup unit (FIG. 1, element 10) for taking a face-picture ("image" in FIG. 1A) of said user (FIG. 1, element 1);

a particular person comparing unit (FIG. 9, elements 905 through 919; Col. 6, lines 48 - 67) for comparing said user's face-picture taken by said image pickup unit with a face-picture of a particular person held in advance (Col. 9, lines 48 - 56; FIG. 9, element 401);

a personal picture acquiring unit (FIG. 1, element 40; FIG. 9, element 401) for acquiring the face-picture of said user from a memory ("database" in Col. 1, lines 64 - 67 and Col. 5, line 63 - Col. 6, line 3); and

an authentication unit (FIG. 1A, element 37; FIG. 9, elements 901, 903) for deciding whether or not said user's face-picture taken by said image pickup unit is identical with the face-picture of said user acquired by said personal picture acquiring unit by a different method ("highest confidence level" in Col. 9, lines 56 - 61 considered "identical") based upon the comparison result (Col. 9, lines 48 - 56) by said particular person comparing unit.

Regarding **claim 2**, Lin discloses the personal authentication apparatus as claimed in claim 1, wherein said face-picture (FIG. 2, element 201) of said particular person (FIG. 1, element 1) is a face-picture of a suspected person (Col. 6, lines 1 – 3; Col. 7, lines 25 - 28),

said particular person comparing unit (FIG. 9, elements 905 though 919) decides whether or not said user's face-picture is similar (“closest set” and “confidence level” in Col. 9, lines 48 – 56 wherein the user’s face-picture is “similar” if the particular person comparing unit receives the face-picture from the face recognizer server) to the face-picture of said suspected person and outputs the decision result as said comparison result (Col. 9, lines 48 - 56),

when said particular person comparing unit decides that said user's face-picture is similar to the face-picture of said suspected person, said authentication unit (FIG. 1A, element 37; FIG. 9, elements 901, 903) decides whether or not said user's face-picture is identical (“highest confidence level” in Col. 9, lines 56 – 61 considered identical) with the face-picture of said user with more strict reference (more strict reference in selecting “the highest confidence level”).

Regarding **claim 11**, Lin discloses the personal authentication apparatus as claimed in claim 1, wherein when said particular person comparing unit (FIG. 9, elements 905 though 919) decides that said user's face-picture is similar (“closest set” and “confidence level” in Col. 9, lines 48 – 56 wherein the user’s face-picture is “similar” if the particular person comparing unit receives the face-picture from the face recognizer server) to the face-picture of said suspected person (Col. 6, lines 1 – 3; Col. 7, lines 25 - 28), said authentication unit (FIG. 1A, element 37; FIG. 9, elements 901, 903) transmits said user's face-picture to a person deciding apparatus installed in other places (FIG. 13; Col. 5, lines 5 - 16) than that of said personal authentication apparatus for deciding whether or not said user is said user.

Regarding **claim 12**, Lin discloses the personal authentication apparatus as claimed in claim 1, wherein the image pickup unit (FIG. 1, element 10) includes a first image pickup unit (FIG. 1, element 10; the image pickup unit before face alignment; Col. 6, lines 36 - 47) and a second image pickup unit (the image pickup unit after face alignment; Col. 6, lines 36 - 47), the particular person comparing unit (FIG. 9, elements 905 though 919) compares the user's face-picture ("image" in FIG. 1A) taken by the first image pickup unit (FIG. 1, element 10; the image pickup unit before face alignment; Col. 6, lines 36 - 47) with the face-picture of the particular person (FIG. 1, element 1),

when the particular person comparing unit decides that the user's face-picture is not similar (Col. 6, lines 36 - 47) to the face-picture of the suspected person, the authentication unit (FIG. 1A, element 37; FIG. 9, elements 901, 903) decides whether or not the user's face-picture taken by the first image pickup unit is identical (the authentication unit automatically "decides" that the user's face-picture is not identical since no recognized face is present) with the face-picture of the user,

when the particular person comparing unit decides that the user's face-picture is similar (refer to references/arguments cited in claim 2) to the face-picture of the suspected person, the authentication unit decides whether or not the user's face-picture taken by the second image pickup unit (the image pickup unit after face alignment; Col. 6, lines 36 - 47) is identical (refer to references/arguments cited in claim 2) with the face-picture of the user.

Regarding **claim 13**, Lin discloses the personal authentication apparatus as claimed in claim 12, wherein the second image pickup unit generates the face-picture (the image pickup unit after face alignment; Col. 6, lines 36 - 47) having more amount of information (once the face is



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aligned, feature extractor element 35, and voting circuit 37 may proceed to extract more information from the image) than that of the face-picture taken by said first image pickup unit (FIG. 1, element 10; the image pickup unit before face alignment; Col. 6, lines 36 - 47).

### ***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (US 6,108,437 A) in view of Lobo et al. (US 5,781,650).

Regarding **claim 3**, while Lin discloses the personal authentication apparatus as claimed in claim 2, wherein when the particular person comparing unit decides that the user's face-picture is similar to the face-picture of the suspected person, the authentication unit decides whether or not the user's face-picture is identical with the face-picture of the user (refer to references/arguments cited in claims 1 and 2), Lin does not teach using the image pickup unit to heighten resolution or gradation, taking the user's face-picture again, and using the enhanced resolution or gradation image to decide whether or not the user's face-picture is identical in order to decide with more strict reference.

Lobo discloses an automatic feature detection and age classification of human faces in digital images (FIG. 1B) that includes extracting wrinkle features ("STEP 3: COMPUTE

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WRINKLE ANALYSIS” in Col. 23, line 49) by using an image pickup unit (FIG. 1B, element 10) to heighten resolution (“...take higher resolution images...” in Col. 23, line 65 – Col. 24, line 5) or gradation and taking the user’s face-picture again (the process of taking higher resolution images requires taking the user’s face-picture again).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for

(i) the image pickup unit of Lin to heighten resolution or gradation and taking the user’s face-picture again, and

(ii) the authentication unit of Lin to use the enhanced resolution or gradation image as one of its feature extractions (Lin, FIG. 9) to decide whether or not the user’s face-picture is identical in order to decide with more strict reference as taught by Lobo “...to provide a method of finding facial features exist from the detected human face...”, Col. 2, lines 44 – 45 and “...to categorize age based on facial features, facial feature ratios and wrinkle analysis...”, Col. 2, lines 49 – 50.

15. **Claims 4, 5 and 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (US 6,108,437 A) in view of Dobashi (US 2002/0126880 A1).

Regarding **claim 4**, while Lin discloses the personal authentication apparatus as claimed in claim 2, Lin does not teach wherein the authentication unit increases the number of the features that are extracted from each of the user's face-picture and the face-picture of the user in order to decide with more strict reference.

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Dobashi discloses a face image recognition apparatus (FIG. 1) wherein an authentication unit (FIG. 9, element 9) increases the number of the features (FIG. 9, elements 108, 109; paragraphs [0070], [0071]) that are extracted from each of the user's face-picture (FIG. 9, element 105) and the face-picture of the user (FIG. 9, element 100) in order to decide with more strict reference (paragraphs [0070], [0071] will thus create a "more strict reference").

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the authentication unit of Lin to increase the number of the features that are extracted from each of the user's face-picture and the face-picture of the user in order to decide with more strict reference as taught by Dobashi "which can alleviate a lowering in the person recognition rate due to a variation in the face image caused by a variation in the standing position of a person and a variation in the face itself and recognize the face image with high precision.", Dobashi, paragraph [0008].

Regarding **claim 5**, while Lin discloses the personal authentication apparatus as claimed in claim 2, Lin does not teach wherein the authentication unit further acquires new features of appearance of the user to decide with more strict reference, and decides whether or not the user's face-picture is identical with the face-picture of the user using the newly acquired features.

Dobashi discloses a face image recognition apparatus (FIG. 1) wherein an authentication unit (FIG. 9, element 9) further acquires new features of appearance (FIG. 9, elements 108, 109; paragraphs [0070], [0071]) of the user (FIG. 9, element 100) to decide with more strict reference (paragraphs [0070], [0071] will thus create a "more strict reference"), and decides whether or not the user's face-picture is identical with the face-picture of the user using the newly acquired features (FIG. 9, element 107).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made for the authentication unit of Lin to acquire new features of appearance of the user to decide with more strict reference, and decides whether or not the user's face-picture is identical with the face-picture of the user using the newly acquired features as taught by Dobashi "which can alleviate a lowering in the person recognition rate due to a variation in the face image caused by a variation in the standing position of a person and a variation in the face itself and recognize the face image with high precision.", Dobashi, paragraph [0008].

Regarding **claim 7**, while Lin discloses the personal authentication apparatus as claimed in claim 1, Lin does not teach wherein the authentication unit changes the type of the features that are extracted from each of the user's face-picture and the face-picture of the user based upon the comparison result by the particular person comparing unit.

Dobashi discloses a face image recognition apparatus (FIG. 1) wherein an authentication unit (FIG. 9, element 9) changes the type of the features (FIG. 9, elements 108, 109; paragraphs [0070], [0071]) that are extracted from each of the user's face-picture (FIG. 9, element 105) and the face-picture of the user based upon the comparison result ("recognition rate" in paragraph [0071]) by the particular person comparing unit (FIG. 9, element 107).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the authentication unit of Lin to change the type of the features that are extracted from each of the user's face-picture and the face-picture of the user based upon the comparison result by the particular person comparing unit as taught by Dobashi "which can alleviate a lowering in the person recognition rate due to a variation in the face image caused by a variation

in the standing position of a person and a variation in the face itself and recognize the face image with high precision.”, Dobashi, paragraph [0008].

16. **Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (US 6,108,437 A) in view of Lobo et al. (US 5,781,650) and Prokoski et al. (US 5,163,094 A).

Regarding **claim 8**, while Lin in view of Lobo disclose the personal authentication apparatus as claimed in claim 3, wherein when the particular person comparing unit decides that the user's face-picture is similar to the face-picture of the suspected person, the authentication unit decides whether or not the user's face-picture is identical with the face-picture of the user (refer to references/arguments cited in claims 1 and 2), Lin in view of Lobo do not teach wherein when the particular person comparing unit decides that the user's face-picture is similar to the face-picture of the suspected person, the image pickup unit takes the user's face-picture by irradiating an invisible light to the user, the authentication unit decides whether or not the user's face-picture is identical with the face-picture of the user using the user's face-picture taken by irradiation of the invisible light to decide with more strict reference.

Prokoski discloses a method for identifying individuals from analysis of elemental shapes derived from biosensor data (FIG. 1) that includes extracting infrared features (Col. 4, lines 43 – 46; FIG. 5) by using an image pickup unit (FIG. 1, element 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for

(i) the image pickup unit of Lin in view of Lobo to irradiate an invisible light (infrared) to the user, and

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(ii) the authentication unit of Lin in view of Lobo to use the infrared image as one of its feature extractions (Lin, FIG. 9) to decide whether or not the user's face-picture is identical in order to decide with more strict reference as taught by Prokoski "...to provide a method for identifying individuals from biosensor data.", column 3, lines 19 – 21.

17. **Claims 6, 9, and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (US 6,108,437 A) in view of Okazaki et al. (US 2002/0176610 A1).

Regarding **claim 6**, while Lin discloses the personal authentication apparatus as claimed in claim 2, wherein the image pickup unit (FIG. 1, element 10) takes the user's face-pictures as an animated image (Col. 5, lines 28 - 35),

the personal picture acquiring unit (FIG. 9, elements 905 through 919) acquires the animated image of the face-pictures of the user from said memory ("database" in Col. 1, lines 64 – 67 and Col. 5, line 63 – Col. 6, line 3), Lin does not disclose wherein the authentication unit decides whether or not the user's face-picture is identical with the face-picture of the user by comparing a plurality of frames in the animated image of said user's face-pictures and a plurality of frames in the animated image of the face-pictures of the user to decide with more strict reference.

Okazaki discloses a face image recording system (FIG. 4; FIG. 6) wherein an authentication unit (FIG. 6, element 30) decides whether or not the user's face-picture (FIG. 3, element 44) is identical ("the processor 31 records this image" in paragraph [0087] to further allow the decision whether or not the user's face-picture is identical) with the face-picture of the user by comparing a plurality of frames in the animated image (FIG. 3, FIG. 4, element 2; "video

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camera” in paragraph [0072]) of the user's face-pictures (FIG. 1, element 1) and a plurality of frames in the animated image of the face-pictures of the user (FIG. 17 wherein the animated image of the face-pictures of the user are the images from video taken over each login time) to decide with more strict reference.

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the authentication unit of Lin to disclose deciding whether or not the user's face-picture is identical with the face-picture of the user by comparing a plurality of frames in the animated image of said user's face-pictures and a plurality of frames in the animated image of the face-pictures of the user to decide with more strict reference. as taught by Okazaki “...to provide a face image recording apparatus, face image recording system, information management system, face image recording method, and information management method which minimize the system installation cost while maintaining a security level meeting an intended use, and which realize highly "convenient" person authentication which is readily used by a user.”, Okazaki, paragraph [0018].

Regarding **claim 9**, while Lin discloses the personal authentication apparatus as claimed in claim 1, wherein the personal authentication apparatus certifies that a plurality of users is the user respectively, the particular person comparing unit compares the user's face-picture taken by the image pickup unit with the face-pictures of a plurality of the particular persons (refer to references/arguments cited in claim 1), Lin does not disclose a log holding unit for holding authentication times of the plurality of the user and the particular persons having a resemblance in response to the user, the authentication unit decides a decision method of whether or not the user is the user using another authentication history of the user held in the log holding unit.

Okazaki discloses a face image recording system (FIG. 4; FIG. 6) that teaches a log holding unit (“record a user’s face image as log data” in paragraph [0003]) for holding authentication times (“date and time” in paragraph [0135]) of the plurality of the user and the particular persons having a resemblance in response to the user (FIG. 6, elements 34, 38), and the authentication unit (FIG. 6, element 30) decides a decision method (FIG. 17; paragraph [0175]) of whether or not the user is the user using another authentication history of the user held in the log holding unit.

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the apparatus of Lin to disclose a log holding unit for holding authentication times of the plurality of the user and the particular persons having a resemblance in response to the user, the authentication unit decides a decision method of whether or not the user is the user using another authentication history of the user held in the log holding unit as taught by Okazaki “...to provide a face image recording apparatus, face image recording system, information management system, face image recording method, and information management method which minimize the system installation cost while maintaining a security level meeting an intended use, and which realize highly "convenient" person authentication which is readily used by a user.”, Okazaki, paragraph [0018].

Regarding **claim 10**, while Lin in view of Okazaki discloses the personal authentication apparatus as claimed in claim 9, Lin in view of Okazaki do not teach wherein each of the plurality of particular persons is the suspected person, when deciding that the face-pictures of the plural other user is similar to the face-pictures of the plural suspected persons respectively within



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a predetermined time, said authentication unit decides whether or not the user's face-picture is identical with the face-picture of the user with more strict reference.

Okazaki discloses a face image recording system (FIG. 4; FIG. 6) that teaches wherein each of the plurality of particular persons (FIG. 6, elements 34, 38) is the suspected person (FIG. 4, element H), when deciding that the face-pictures of the plural other user is similar to the face-pictures of the plural suspected persons respectively within a predetermined time ("predetermined time" in paragraph [0087]), the authentication unit (FIG. 6, element 30) decides whether or not the user's face-picture is identical ("the processor 31 records this image" in paragraph [0087] to further allow the decision whether or not the user's face-picture is identical) with the face-picture of the user with more strict reference.

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the apparatus of Lin to disclose wherein each of the plurality of particular persons is the suspected person, when deciding that the face-pictures of the plural other user is similar to the face-pictures of the plural suspected persons respectively within a predetermined time, said authentication unit decides whether or not the user's face-picture is identical with the face-picture of the user with more strict reference as taught by Okazaki "...to provide a face image recording apparatus, face image recording system, information management system, face image recording method, and information management method which minimize the system installation cost while maintaining a security level meeting an intended use, and which realize highly "convenient" person authentication which is readily used by a user.", Okazaki, paragraph [0018].

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18. **Claim 14** is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (US 6,108,437 A) in view of Colmenarez et al. (US 2002/0167403 A1).

Regarding **claim 14**, while Lin discloses the personal authentication apparatus as claimed in claim 1, Lin does not teach wherein when the particular person comparing unit decides that the user's face-picture is similar to the face-picture of the suspected person, the authentication unit acquires the user's face-picture from other personal authentication apparatus provided on a path through which the user passes, and decides whether or not the user's face-picture taken by the image pickup unit is identical with the face-picture of the user using that face-picture.

Colmenarez discloses an automatic system for monitoring persons entering and leaving changing rooms (FIG. 1) wherein when the particular person comparing unit (FIG. 3, elements 520, 530) decides that the user's face-picture (FIG. 1, element 20) is similar to the face-picture of the suspected person (FIG. 5, element S25), the authentication unit (FIG. 1, element 5; FIG. 2, element 100) acquires the user's face-picture from other personal authentication apparatus (FIG. 1, element 15) provided on a path through which the user passes (FIG. 1, element 65), and decides whether or not the user's face-picture taken by the image pickup unit (FIG. 1, element 10) is identical (FIG. 5, element S35, S40) with the face-picture of the user using that face-picture ("face-recognition is used" in paragraph [0009]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the apparatus of Lin to include wherein when the particular person comparing unit decides that the user's face-picture is similar to the face-picture of the suspected person, the authentication unit acquires the user's face-picture from other personal authentication apparatus provided on a path through which the user passes, and decides whether or not the user's face-

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picture taken by the image pickup unit is identical with the face-picture of the user using that face-picture as taught by Colmenarez so that "...the problem of comparing customer data is reduced to a comparison of images of the entering and leaving customers.", Colmenarez, paragraph [0030].

### ***Double Patenting***

19. **Claim 1** of the present application (of which will be referred to as '261) is provisionally rejected on the ground of nonstatutory double patenting over **claim 1** of copending Application No. 11/150,248 (of which will be referred to as '248). This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

Regarding **claim 1** of '261, **claim 1** of '248 discloses a personal authentication apparatus for certifying that a user is the user (lines 1 – 3, wherein if the user already has a picture in the dating service database, would be in effect certifying that the user is the actual user when matched), comprising:

an image pickup unit for taking a face-picture of said user ("...inputting a model image including a face of a person...");

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a particular person comparing unit for comparing said user's face-picture taken by said image pickup unit with a face-picture of a particular person held in advance (“...accessing a plurality of profile images...”);

a personal picture acquiring unit for acquiring the face-picture of said user from a memory (“...online dating service...” must contain memory from which the plurality of profile images can be accessed); and

an authentication unit for deciding whether or not said user's face-picture taken by said image pickup unit is identical with the face-picture of said user acquired by said personal picture acquiring unit by a different method based upon the comparison result by said particular person comparing unit (“...outputting a display view showing a result of said face recognition, said display view including at least one profile image resembling said model image...” where displaying at least one profile image is “identical” with the face-picture of the user).

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

### ***Conclusion***

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David P. Rashid whose telephone number is (571) 270-1578. The examiner can normally be reached Monday - Friday 8:30 - 17:00 ET.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Werner can be reached on (571) 272-7401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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Examiner  
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**Brian P. Werner**  
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